

Military Armored Vehicle, Tank, and Tank Component Manufacturing: 2002

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2002 Economic Census

Manufacturing

Industry Series



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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
336992, Military armored vehicle, tank, and tank component manufacturing											
2002..	31	39	5 098	282 381	2 496	5 268	113 304	818 038	662 509	1 450 942	15 267
2001..	N	N	4 110	252 055	1 735	3 694	81 347	810 707	474 440	1 221 211	15 072
2000..	N	N	4 378	251 402	2 070	4 347	90 870	719 004	387 524	1 128 565	16 828
1999..	N	N	4 602	264 254	2 223	4 613	95 017	668 939	425 416	1 064 754	17 358
1998..	N	N	5 042	257 996	2 312	4 934	105 279	730 743	443 792	1 172 724	15 735
1997..	37	42	5 773	267 525	2 696	5 455	113 732	543 119	475 163	1 063 668	17 298

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
336992, Military armored vehicle, tank, and tank component manufacturing												
United States.....	—	39	24	5 098	282 381	2 496	5 268	113 304	818 038	662 509	1 450 942	15 267
Michigan.....	—	11	5	522	24 946	390	922	15 329	49 134	46 798	97 041	3 429

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
336992, Military armored vehicle, tank, and tank component manufacturing	
Companies ¹	number.. 31
All establishments ²	number.. 39
Establishments with 1 to 19 employees	number.. 15
Establishments with 20 to 99 employees	number.. 12
Establishments with 100 employees or more	number.. 12
All employees ³	number.. 5 098
Total compensation	\$1,000.. 353 372
Annual payroll	\$1,000.. 282 381
Total fringe benefits	\$1,000.. 70 991
Production workers, average for year	number.. 2 496
Production workers on March 12	number.. 2 482
Production workers on May 12	number.. 2 482
Production workers on August 12	number.. 2 500
Production workers on November 12	number.. 2 513
Production worker hours	1,000.. 5 268
Production worker wages	\$1,000.. 113 304
Total cost of materials	\$1,000.. 662 509
Materials, parts, containers, packaging, etc., used	\$1,000.. 641 089
Resales	\$1,000.. 3 026
Purchased fuels	\$1,000.. 2 185
Purchased electricity	\$1,000.. 9 186
Contract work	\$1,000.. 7 023
Quantity of electricity purchased for heat and power	1,000 kWh.. 155 333
Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
Total value of shipments	\$1,000.. 1 450 942
Primary products value of shipments	\$1,000.. 1 386 196
Secondary products value of shipments	\$1,000.. 56 520
Total miscellaneous receipts	\$1,000.. 8 226
Value of resales	\$1,000.. 3 556
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 96
Value of primary products shipments made in all industries	\$1,000.. 1 745 492
Value of primary products shipments made in this industry	\$1,000.. 1 386 196
Value of primary products shipments made in other industries	\$1,000.. 359 296
Coverage ratio	percent.. 79
Value added	\$1,000.. 818 038
Total inventories, beginning of year	\$1,000.. 443 591
Finished goods inventories	\$1,000.. 3 230
Work-in-process inventories	\$1,000.. 251 564
Materials and supplies inventories	\$1,000.. 188 797
Total inventories, end of year	\$1,000.. 495 826
Finished goods inventories	\$1,000.. 4 102
Work-in-process inventories	\$1,000.. 280 297
Materials and supplies inventories	\$1,000.. 211 427
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 330 149
Total capital expenditures (new and used)	\$1,000.. 15 267
Buildings and other structures (new and used)	\$1,000.. 4 230
Machinery and equipment (new and used)	\$1,000.. 11 037
Automobiles, trucks, etc., for highway use	\$1,000.. 279
Computers and peripheral data processing equipment	\$1,000.. 2 448
All other expenditures for machinery and equipment	\$1,000.. 8 310
Total retirements	\$1,000.. 16 561
Gross value of depreciable assets at end of year	\$1,000.. 328 855
Depreciation charges during year	\$1,000.. 12 165
Total rental payments	\$1,000.. 14 804
Buildings and other structures	\$1,000.. 10 589
Machinery and equipment	\$1,000.. 4 215
Total other expenses ⁴	\$1,000.. 66 999
Response coverage ratio ⁵	percent.. 80
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 4 798
Communications services ⁴	\$1,000.. D
Legal services ⁴	\$1,000.. D
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. D
Advertising and promotional services ⁴	\$1,000.. 1 778
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. D
Refuse removal (including hazardous waste) services ⁴	\$1,000.. D
Management consulting and administrative services ⁴	\$1,000.. D
Taxes and license fees ⁴	\$1,000.. D
All other expenses ⁴	\$1,000.. 42 279

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
336992, Military armored vehicle, tank, and tank component manufacturing											
All establishments	—	39	5 098	282 381	2 496	5 268	113 304	818 038	662 509	1 450 942	15 267
Establishments with—											
1 to 4 employees	7	4	6	230	4	4	104	607	281	888	41
5 to 9 employees	4	3	b	D	D	D	D	D	D	D	D
10 to 19 employees	2	8	133	6 130	75	178	2 610	11 294	12 107	25 806	382
20 to 49 employees	2	9	266	13 145	178	394	7 229	51 394	23 681	71 895	1 583
50 to 99 employees	—	3	215	5 836	160	344	3 776	13 561	16 071	30 630	1 172
100 to 249 employees	—	7	1 111	52 006	758	1 564	30 597	154 300	237 263	388 939	4 923
250 to 499 employees	—	1	e	D	D	D	D	D	D	D	D
500 to 999 employees	—	3	g	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	1	g	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	—	—	—	—	—	—	—	—	—	—	—

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
336992	Military armored vehicle, tank, and tank component manufacturing	39	5 098	282 381	2 496	5 268	113 304	818 038	662 509	1 450 942	15 267
3369920	Military armored vehicles, tanks, and tank components	39	5 098	282 381	2 496	5 268	113 304	818 038	662 509	1 450 942	15 267

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
336992	Military armored vehicle, tank, and tank component manufacturing	2002.. N 1997.. N	X X	X X	1 745 492 1 188 878
3369920	Military armored vehicles, tanks, and tank components	2002.. N 1997.. N	X X	X X	1 745 492 1 188 878
33699201	Tanks and parts	2002.. N 1997.. N	X X	X X	821 406 900 962
3369920111	Tanks and parts	2002.. 44 1997.. 40	X X	X X	821 406 900 962
33699202	Self-propelled weapons and parts and other full tracked combat vehicles and armored utility vehicles, including parts	2002.. N 1997.. N	X X	X X	901 508 263 494
3369920214	Self-propelled weapons and parts	2002.. 5 1997.. 6	X X	X X	D D
3369920218	Other full-tracked combat vehicles and armored utility vehicles, including parts	2002.. 19 1997.. N	X X	X X	D N
3369920Y	Military armored vehicles, tanks, and tank components, nsk, total	2002.. N 1997.. N	X X	X X	22 578 24 422
3369920YWW	Military armored vehicles, tanks, and tank components, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	22 578 23 264
3369920YWY	Military armored vehicles, tanks, and tank components, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	— 1 158

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
336992	Military armored vehicle, tank, and tank component manufacturing		
00900001	Total materials	X	641 089
	.....2002..	X	437 355
	.....1997..	X	
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	44 504
	.....2002..	X	15 426
	.....1997..	X	
33200095	Other fabricated metal products (excluding castings and forgings)	X	115 705
	.....2002..	X	165 166
	.....1997..	X	
33151001	Iron and steel castings (rough and semifinished)	X	8 871
	.....2002..	X	3 756
	.....1997..	X	
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	1 819
	.....2002..	X	D
	.....1997..	X	D
33211101	Iron and steel forgings	X	D
	.....2002..	X	D
	.....1997..	X	
33211203	Aluminum and aluminum-base alloy forgings	X	D
	.....2002..	X	D
	.....1997..	X	
33211207	Other nonferrous forgings	X	D
	.....2002..	X	—
	.....1997..	X	
33120001	Steel shapes and forms (excluding castings, forgings, and fabricated metal products)	X	43 226
	.....2002..	X	D
	.....1997..	X	
33142111	Copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	X	D
	.....2002..	X	D
	.....1997..	X	
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	X	D
	.....2002..	X	N
	.....1997..	X	
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products)	X	D
	.....2002..	X	N
	.....1997..	X	
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D
	.....2002..	X	N
	.....1997..	X	
32610011	Fabricated plastics products (excluding gaskets)	X	D
	.....2002..	X	N
	.....1997..	X	
00190055	Electronic, hydraulic, and mechanical subassemblies	X	D
	.....2002..	X	N
	.....1997..	X	
32100019	Rough and dressed lumber	X	D
	.....2002..	X	N
	.....1997..	X	
32500065	Other chemicals and allied products	X	D
	.....2002..	X	N
	.....1997..	X	
33351501	Machine tool accessories, including cutting tools	X	126
	.....2002..	X	N
	.....1997..	X	
32221001	Paperboard containers, boxes, and corrugated paperboard	X	89
	.....2002..	X	N
	.....1997..	X	
00970099	All other materials and components, parts, containers, and supplies	X	194 819
	.....2002..	X	176 014
	.....1997..	X	
00971000	Materials, ingredients, containers, and supplies, nsk	X	43 161
	.....2002..	X	34 795
	.....1997..	X	

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.